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FURTHER DIAGNOSES OF NEW AMERICAN SPIDERS

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The new species described below are based for the most part on material collected in southern Texas by Mr. Stanley Mulaik. In addition, species are named from specimens received from Mr. Peter Steckler of New York City and Mr. H. K. Wallace of Gainesville, Florida. The types are deposited in the collection of The American Museum of Natural History through the courtesy of these collectors.

Ctenizidae

Pachylomerus funereus, new species

Figures 1 and 2

MALE.—Total length, 14.00 mm. Carapace, 7.00 mm. long, not including the chelicerae, 6.60 mm. wide at the second coxae.

Carapace uniform black, not shining, finely rugose. Median groove semilunar in outline, deep, a little wider than the eye group, placed seven-tenths of the length back (47/70). Carapace nearly truncate in front as seen from above, moderately rounded on the sides back to the widest point, rather abruptly and evenly constricted to the base of the abdomen. Pars cephalica much higher than the thoracic portion.

Eyes of the first row very strongly procurved, the smaller medians separated by scarcely half their greatest diameter, three-fourths their diameter from the large anterior lateral eye. Posterior row of eyes weakly procurved, the oval medians separated by twice their long diameter, by four times their short diameter, two-thirds their short diameter from the lateral eyes. Median ocular quadrangle slightly broader than long (8/7), narrowed in front (80/73). Ratio of the eyes: ALE: AME:PLE:PME = 53:40:30:27.

Sternum longer than broad (9/8), brown with a pale median streak, armed with black hairs on the margins. Labium black, finely rugose, broader than long (30/22), clothed with a few black hairs and armed with nine cusps at the distal end. Endites black, finely rugose, covered sparsely with black hairs and provided with a few cusps on the inner side. Coxae pale brown. Chelicerae black, with six teeth on the retrolateral margin, two of which are smaller, and with seven teeth on the retrolateral margin, four of which are smaller. Legs black, very slightly rugose, especially the first femora, the third tibia with the usual dorsal excavation characteristic of the genus. Distal joints of the first leg with a row of short robust setae on the retrolateral side of the ventral surface, seven on the patella, twenty-two on the tibia, fifteen on the metatarsus and eleven on the tarsus; and with a row on the prolateral side made up of one-third the number. Second leg spined much as the first one. Tarsal claws three, the paired claws on all the legs with a single denticle near the base.

	Femur	Patella	Tibia	Metatarsus	Tarsus	Total
I	5.20	3.20	3.60	2.70	1.40	16.10 mm.
II	5.00	2.80	3.00	2.50	1.30	14.60 mm.
III	4.30	2.50	2.50	3.00	2.20	14.50 mm.
IV	5.30	2.80	3.50	4.50	2.30	18.40 mm.

Type Locality.—Male holotype from Edinburg, Texas, collected June 1, 1935, by Mr. Stanley Mulaik.

Uloboridae

Uloborus arizonicus, new species

Figure 3

Male.—Total length, 3.80 mm. Carapace, 1.70 mm. long, 1.50 mm. wide.

Carapace pale yellowish brown, with two inconspicuous narrow black bands that begin near the lateral eye of each side and go caudad to the margin. Eyes narrowly ringed in black. Clothing of the carapace a sparse covering of pale hairs. Sternum, mouth parts, coxae and legs pale yellowish brown to bright orange-brown. Legs clothed with very fine, pale hairs and a few spines. Dorsum of abdomen gray to white, the margins infuscated, medially presenting a longitudinal pale stripe made up of white spots. Venter of abdomen gray with white spots, the whole abdomen clothed with inconspicuous hairs.

Carapace slightly longer than broad, suborbicular in outline, the front margin broadly rounded and without indication of differentiation between the cephalic and thoracic portions. Carapace flattened above for most of the length, the sides declining very abruptly. Pars cephalica indicated from above by rather deep cephalic sutures and a deep median suture, the cephalic sutures forming a very shallow V-shaped figure. Eyes of the first row strongly recurved from in front, apparently procurved as viewed from above, the medians separated by two-thirds their diameter, one and one-half times their diameter from the much smaller lateral eyes, the diameter of which is about half that of the medians. Eyes of the second row weakly recurved, the medians separated by two and one-half times their diameter, about two diameters from the slightly larger lateral eyes. Median ocular quadrangle as broad as long, seemingly much longer than broad, narrowed in front (19/14), the posterior medians much smaller, about equal in size to the anterior laterals. Sternum longer than broad (9/7), weakly rounded in front and on the sides, bluntly pointed between the posterior coxae which are separated by half their width. Labium longer than broad (19/18). First leg considerably longer than the others, without an ornamental fringe as in *Uloborus americanus*, lacking ventral spines but with four prolateral, four retrolateral and eight dorsals on the tibia, most of them concentrated in the distal half of the joint. First leg: femur, 2.10 mm., patella, 0.70 mm., tibia, 1.80 mm., metatarsus, 1.90 mm., and tarsus, 1.00 mm. long. Palpus as figured.

Type Locality.—Male holotype from Sabina Basin, Santa Catalina Mountains, Arizona, at 3800 feet elevation, taken July 8–12, 1916, by Dr. F. E. Lutz.

This interesting species is distinguished from all other species from

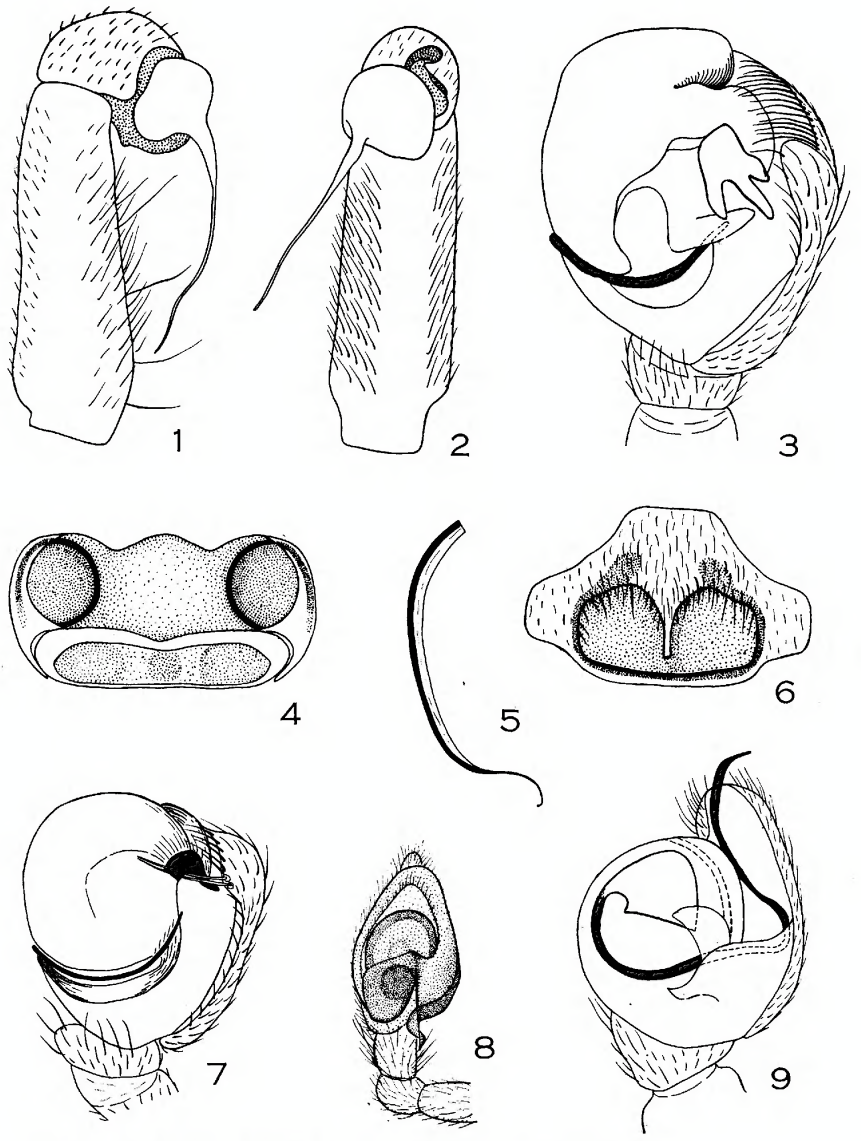

Fig. 1. *Pachylomerus funereus*, new species, palpus, lateral view.
Fig. 2. *Pachylomerus funereus*, new species, palpus, ventral view.
Fig. 3. *Uloborus arizonicus*, new species, palpus, ventral view.
Fig. 4. *Agelena oklahoma*, new species, epigynum.
Fig. 5. *Agelena oklahoma*, new species, distal end of embolus.
Fig. 6. *Agelena absoluta*, new species, epigynum.
Fig. 7. *Uloborus segregatus*, new species, palpus, ventral view.
Fig. 8. *Dictyna meditata*, new species, palpus, ventral view.
Fig. 9. *Episinus minusculus*, new species, palpus, ventral view.

the United States by the very pale coloration, the unbanded and unmarked legs, the nearly straight posterior eye row, and the very broad suborbicular carapace.

Uloborus segregatus, new species

Figure 7

MALE.—Total length, 2.66 mm. Carapace, 1.10 mm. long, 0.94 mm. wide.

Carapace sparsely clothed with inconspicuous pale hairs. Sides of the carapace dark brown to black, somewhat streaked, with a median longitudinal pale stripe that begins within the median ocular quadrangle as a narrow streak and expands gradually to the caudal margin where it is slightly wider than the width of the median eyes of the posterior row. Sternum pale yellowish brown, with a median dark streak. Mouth parts and coxae pale yellowish brown, infuscated or sometimes marked with pink or bright red. First leg black to reddish brown, the femur infuscated, the distal joints progressively darker reddish brown. Second leg as the first. Third leg pink to reddish brown, the metatarsus and the tarsus pale yellow. Femur of the fourth leg variegated with pink, the tarsus pale yellow, the intermediate joints mainly pink. Abdomen variable, the dorsum with a narrow median longitudinal black stripe, flushed with pink, the sides and the venter irregularly maculate in black and pink.

Carapace longer than broad, rounded behind and on the sides, the head portion narrowed and somewhat pointed. Median suture a deep excavation, the cephalic sutures obsolete. Carapace rather low but convex, equal in height for most of the length. Eyes of the first row straight from in front, strongly recurved as seen from above, the medians separated by three-fourths their diameter, as far from the much smaller lateral, the diameter of which is about one-half that of the median eye. Eyes of the second row strongly recurved, the medians separated by two diameters, one and one-third their diameter from the subequal laterals. Median ocular quadrangle longer than broad (26/25), apparently much longer than broad, the anterior eyes larger. Sternum longer than broad (60/44). Labium longer than broad (15/14). First leg: femur, 1.50 mm., patella, 0.54 mm., tibia, 1.20 mm., metatarsus, 1.35 mm. and tarsus, 0.54 mm. long.

FEMALE.—Total length, 5.00 mm.

Coloration much more variable than in the male. Carapace dark on the sides, occasionally with a narrow white marginal band, invariably with a light median stripe that expands caudally. Abdomen bituberculate, very much elevated at the middle, the posterior declivity abrupt. Abdomen immaculate white to yellow or marked as in the male (in which case the abdomen is not elevated) or conspicuously spotted in black as follows: one spot at the base of the dorsum and two very large spots on each side. Structure essentially as in the male. Epigynum as in *Uloborus americanus*.

TYPE LOCALITY.—Male holotype and two male paratypes from Edinburg, Texas, taken September 16, 1935, by Mr. Stanley Mulaik. Female allotype and paratypes from 5 miles southeast of Weslaco, Texas, July 21, 1935 (S. Mulaik).

This species differs from *Uloborus americanus* in lacking the ornamentation on the tibia of the first leg, in not having the legs conspicu-

ously banded, in the expanded pale marking on the carapace and in the details of the genital organs.

Dictynidae

Dictyna meditata, new species

Figure 8

MALE.—Total length, 1.80 mm. Carapace, 0.76 mm. long, 0.58 mm. wide.

Carapace reddish brown, darker on the sides, the posterior declivity streaked in black, clothed with long white hairs. Eyes narrowly ringed in black. Sternum, mouth parts and chelicerae reddish brown. Legs pale yellow, unmarked, clothed with pale hairs. Abdomen light reddish brown on the sides, the dorsum with a median longitudinal white band, the venter paler.

Carapace longer than broad, widest between the second coxae, the pars thoracica suborbicular in outline as seen from above, convex, the pars cephalica much higher, very strongly convex, the width at the second eye row less than two-thirds the greatest width (35/58). Clypeus one and one-half times as high as the diameter of an anterior median eye. Eyes of the first row straight, the medians separated by a diameter, half as far from the larger laterals. Second row of eyes weakly recurved, the medians separated by a diameter, as far from the subequal laterals. Median ocular quadrangle broader than long (18/13), as wide in front as behind, the posterior eyes slightly larger. Sternum longer than broad (46/40), truncated in front, bluntly rounded behind, the posterior coxae separated by their width. Labium broader than long (16/13). Legs without spines, the first tibia and patella, 0.80 mm. long. Palpus as figured, the tibia with a very short dorsal spur near the base.

TYPE LOCALITY.—Male holotype and paratype from La Buena Ventura, Vera Cruz, Mexico, July, 1909, Dr. A. Petrunkevitch, collector. Male paratype from La Ceiba, Honduras.

Oonopidae

Opopaea devia, new species

Figure 13

FEMALE.—Total length, 1.63 mm. Carapace, 0.57 mm. long, 0.46 mm. wide.

Carapace bright reddish brown, darker on the sides, clothed with a few erect black hairs, the eyes enclosing a black field. Sternum, mouth parts and appendages bright reddish brown, lighter than the carapace, sparsely clothed with black hairs. Abdomen pale white to gray, the dorsum almost completely covered by a bright reddish brown, sclerotized scutum which is evenly covered with short black hairs, the position of each hair indicated by a shallow round depression. Venter almost completely covered by a similar scutum. Spinnerets with a sclerotized ring encircling them.

Carapace longer than broad, an elongate oval in outline, somewhat emarginated behind and weakly narrowed in front. Carapace convex, flatter than usual in the genus, almost equal in height throughout the length, the posterior declivity moderate. Eyes six, the anterior medians lacking, the lateral eyes large, separated by one-fifth their diameter. Eyes of the second row straight, the medians contiguous, also con-

tiguous with the smaller laterals. Quadrangle of the anterior laterals and the posterior median eyes broader than long (14/12), broader in front, the anterior eyes larger. Sternum longer than broad (40/32), truncated in front, weakly rounded on the sides, truncated between the posterior coxae which are separated by more than the length of the coxa (16/13). Labium broader than long (11/6), about half as high as the convergent endites. Legs without spines. Coxae abruptly constricted near the base.

TYPE LOCALITY.—Female holotype from Edinburg, Texas, taken May 30, 1935, by Mr. Stanley Mulaik.

Oonops stylifer, new species

Figures 10, 11, and 12

MALE.—Total length, 1.30 mm. Carapace, 0.63 mm. long, 0.45 mm. wide.

Carapace pale yellow, darker on the sides, the eyes enclosing a black field, clothed with a few erect black hairs. Under parts and legs pale yellow, sparsely covered with black hairs. Abdomen white to gray, clothed with inconspicuous dark hairs.

Carapace longer than broad, a long oval in outline, the caudal margin truncated, the sides rounded, the anterior end narrowed, weakly constricted at the sides just behind the eyes. Carapace convex, equal in height for most of the length, the posterior declivity moderate. Eyes six, the anterior medians lacking, the large laterals separated by one-half their diameter. Eyes of the second row recurved, a line through the centers of the laterals cutting the posterior margin of the medians, the median eyes contiguous, subcontiguous with the equal laterals. All eyes subequal. Quadrangle of the anterior laterals and the posterior median eyes broader than long (14/8), narrowed behind (14/9). Sternum longer than broad (40/36), truncated in front, weakly rounded on the sides, truncated between the posterior coxae which are separated by their length. Labium broader than long (12/7). Coxae constricted near the base. Palpus as figured, the embolus a very long, fine spine.

TYPE LOCALITY.—Male holotype from Edinburg, Texas, June, 1935, collected by Mr. Stanley Mulaik.

Oonops furtivus, new species

Figures 19, 20, and 21

MALE.—Total length, 1.45 mm. Carapace, 0.64 mm. long, 0.48 mm. wide.

Carapace, appendages and abdomen concolorous, gray to pale yellow. Carapace clothed with long dark erect hairs. The posterior legs with a few very weak spines. Abdomen evenly clothed with long dark erect hairs.

Carapace longer than broad, oval in outline, narrowed slightly in front to form the head portion, weakly rounded behind. Pars thoracica convex, a little higher than the head portion, the sutures obsolete. Eyes six, the anterior medians missing, the anterior laterals separated by scarcely a radius. Eyes of the second row recurved, the medians contiguous, subcontiguous with the subequal laterals. All eyes subequal. Quadrangle of the anterior laterals and the posterior medians broader than long (15/10), narrowed behind in the same ratio. Sternum longer than broad (42/36), truncated in front, weakly rounded on the sides, broadly rounded between the

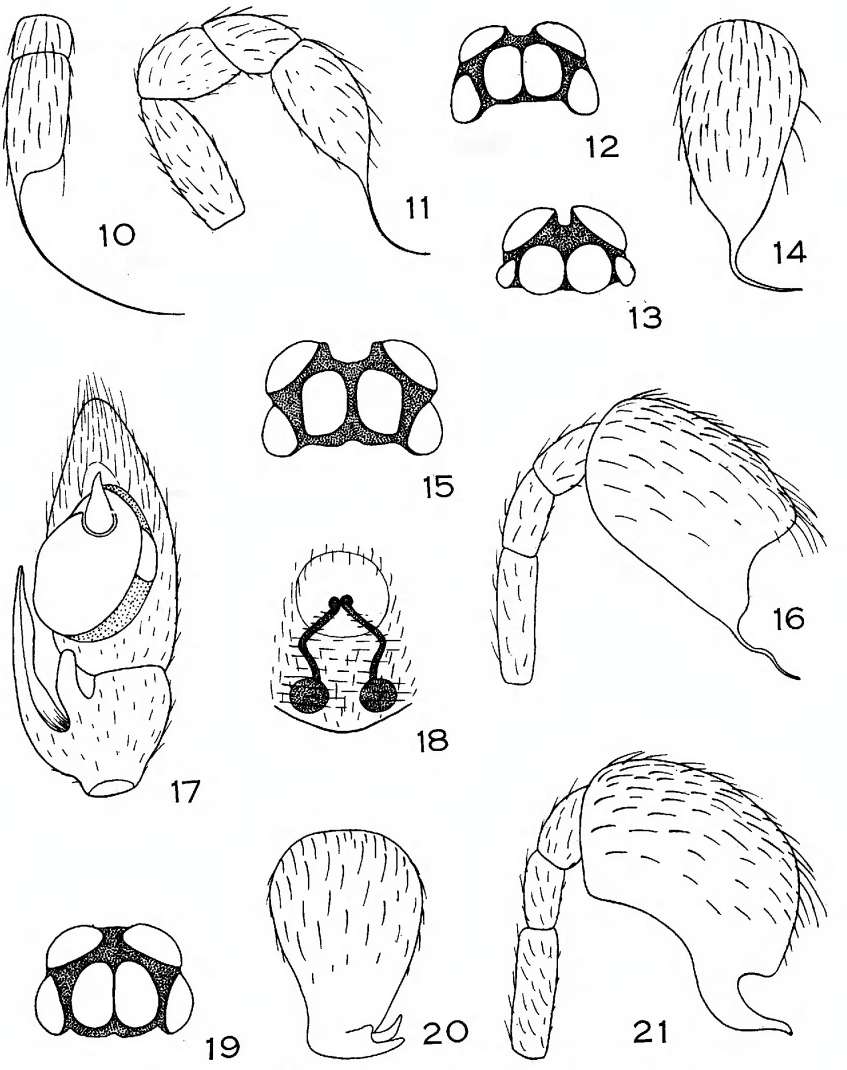

Fig. 10. *Oonops stylifer*, new species, palpus, dorsal view of tarsus.
Fig. 11. *Oonops stylifer*, new species, palpus, lateral view.
Fig. 12. *Oonops stylifer*, new species, eyes.
Fig. 13. *Opopaea devia*, new species, eyes.
Fig. 14. *Oonops secretus*, new species, palpus, dorsal view of tarsus.
Fig. 15. *Oonops secretus*, new species, eyes.
Fig. 16. *Oonops secretus*, new species, palpus, lateral view.
Fig. 17. *Phrurolithus leviculus*, new species, palpus, ventral view.
Fig. 18. *Phrurolithus leviculus*, new species, epigynum.
Fig. 19. *Oonops furtivus*, new species, eyes.
Fig. 20. *Oonops furtivus*, new species, palpus, dorsal view of tarsus.
Fig. 21. *Oonops furtivus*, new species, palpus, lateral view.

posterior coxae which are separated by their width. Labium broader than long (11/8). Coxae weakly constricted near the base. First legs unspined, the last with weak spines as follows: tibia, prolateral and retrolateral, 1–1–1, ventral, 1–1–2; metatarsus, prolateral and retrolateral, 1, dorsal, 1, ventral, 2–2–2. Tarsus of male palpus greatly enlarged, the embolus a heavy curved spur. Details of palpus as figured.

TYPE LOCALITY.—Male holotype from seven miles east of Edinburg, Texas, February 17, 1935, collected by Mr. Stanley Mulaik. Two male paratypes from Edinburg, Texas, June, 1935 (S. Mulaik).

Oonops secretus, new species

Figures 14, 15, and 16

MALE.—Total length, 1.40 mm. Carapace, 0.64 mm. long, 0.46 mm. wide.

Carapace, appendages and abdomen pale yellow in color, the eyes enclosing a black field. Hairs mostly rubbed off but apparently once sparsely covering the whole carapace and abdomen. Legs clothed with inconspicuous dark hairs.

Carapace longer than broad, convex, a long oval as seen from above, weakly rounded beind, narrowed somewhat in front. Height of the carapace about equal throughout the length, the posterior declivity moderate, the sutures obsolete. Eyes six, the anterior medians missing, the anterior laterals large, separated by two-thirds their diameter. Eyes of the posterior row recurved, the medians contiguous, subcontiguous with the slightly smaller laterals. Quadrangle of the anterior laterals and the posterior medians broader than long (17/10), narrowed behind (17/12), the eyes subequal. Sternum longer than broad (41/35), truncated in front, rounded on the sides, broadly rounded between the posterior coxae which are separated by their width. Labium broader than long (12/7). Last leg with two unpaired weak spines beneath the tibia and one single spine beneath the metatarsus. The rubbed nature of the specimen makes it uncertain that some spines are not missing.

TYPE LOCALITY.—Male holotype from fifteen miles southwest of Harlingen, Texas, taken November 18, 1934, by Mr. Stanley Mulaik.

This tiny spider may well be identical with *Oonops spinimanus* Simon of the West Indies, but the apparent lack of a conductor of the embolus and the other slight differences in the palpus make it equally probable that two species are represented.

Oonops spinimanus Simon

Oonops spinimanus SIMON, 1891, Proc. Zool. Soc. London, p. 563, Pl. XLII, fig. 6.

RECORD.—Females from Newman's Lake, near Gainesville, Florida, taken June 13, 1935, by W. Ivie and W. J. Gertsch, seem to belong to this species. The armature of spines on the palpus of the females agrees well with Simon's species. Other females have been taken at other localities in Alachua County, Florida, by Mr. H. K. Wallace.

Oonops floridanus (Chamberlin and Ivie)

Oonopinus floridanus CHAMBERLIN AND IVIE, 1935, Bull. Univ. Utah, XXVI, p. 9, Pl. II, figs. 8, 9.

RECORD.—This species, which is somewhat smaller than *Oonops spinimanus* Simon was common at Newman's Lake, near Gainesville, Florida, June 13, 1935 (W. Ivie and W. J. Gertsch). The female lacks the armature of long spines that is found in *spinimanus*. The species, described in *Oonopinus*, is congeneric with *spinimanus* and the species diagnosed above, and is closely related to *Oonops furtivus*, new species.

Theridiidae

Episinus minusculus, new species

Figure 9

MALE.—Total length, 1.50 mm. Carapace, 0.60 mm. long, 0.52 mm. wide. Abdomen, 0.93 mm. long, 0.60 mm. wide.

Carapace with a median longitudinal black band that encloses the eye region and runs caudad to the end of the carapace; the sides with a pale yellow band in which are three black spots, the margins with a black seam. Sternum pale yellow, broadly margined in black. Coxae and labium pale yellow to white, the endites marked with black. Basal portion of first and fourth femora yellow, the distal end with broad black annulae. Patellae of these legs black, the tibiae and metatarsi with distal annulae, otherwise pale yellow. Second leg with an incomplete ring on the patella and with narrow distal black annulae on the tibia and metatarsus. Fourth leg with a distal ring on the metatarsus, otherwise pale yellow to white. Basal joints of palpus black, the tarsus light brown. Abdomen irregularly maculate above with black and white, darkest at the anterior end and on the small side tubercles. Venter mainly black.

Eyes of the first row straight from in front, strongly recurved as seen from above, the medians separated by two-thirds their diameter, subcontiguous with the subequal laterals. Second row of eyes slightly procurved, the medians separated by nearly two-thirds their diameter, as far from the subequal laterals. Median ocular quadrangle as broad as long, slightly narrowed behind, the eyes subequal. Clypeus one and one-half times as high as the diameter of an anterior median eye. Sternum longer than broad (41/34), truncated behind, the posterior coxae separated by their length. Palpus as figured.

	FEMUR	PATELLA	TIBIA	METATARSUS	TARSUS	TOTAL
I	0.85	0.27	0.63	0.67	0.34	2.76 mm.
II	0.55	0.20	0.34	0.38	0.25	1.72 mm.
III	0.38	0.17	0.24	0.30	0.28	1.37 mm.
IV	0.75	0.27	0.56	0.65	0.35	2.58 mm.

TYPE LOCALITY.—Male holotype from five miles south of San Juan, Texas, February 22, 1935, collected by Mr. Stanley Mulaik.

Argiopidae

Tetragnatha seminola, new species

Figures 22 and 23

MALE.—Total length, 5.70 mm., not including the chelicerae. Carapace, 2.00 mm. long, 1.30 mm. wide.

Carapace yellow, the cephalic sutures darkened, the eyes ringed in black. Legs concolorous with the carapace, unmarked, armed with rows of black hairs and a few short weak spines. Abdomen yellow, reticulated in gray.

Carapace much longer than broad, low, the sutures well marked. Eyes of the first row nearly straight as seen from in front, recurved from above, the medians separated by their diameter, one and one-half diameters from the much smaller laterals. Eyes of the second row weakly recurved, the medians separated by nearly one and one-half times their diameter, about as far from the smaller laterals. Median ocular quadrangle as broad as long, equally wide in front as behind, the eyes subequal, the anterior median a diameter from the posterior median eye. Lateral eyes of each side subequal in size, separated by a diameter, nearer together than the median eyes (10/6). Clypeus scarcely as high as the diameter of an anterior median eye. Eyes occupying six-sevenths of the width of the head at that point. Median groove situated back seven-tenths of the total length. Sternum four-fifths as broad as long, truncated below the labium and with a small hook at each side, extended behind as a narrow band between the posterior coxae which are separated by one-third their width. Labium as broad as long, three-sevenths as long as the subparallel endites. Chelicera dorsally with a very stout tooth near the distal end that has a weak tooth below the apex, with two very stout teeth near it on the inner side and six smaller teeth along the inner margins that are spaced in the distal three-fourths of the joint; lower cheliceral margin with six teeth below, spaced in the distal half. Claw evenly curved. Cymbium of male palpus normal, the paracymbium very weakly emarginated at the distal end. Patella and tibia of palpus subequal in length. First leg: femur, 4.30 mm., patella 0.75 mm., tibia, 4.15 mm., metatarsus, 4.15 mm., and tarsus, 1.30 mm. long.

TYPE LOCALITY.—Male holotype and paratype from the northeast shore of Lake Okeechobee, Florida, collected November 16, 1932, by Mr. H. K. Wallace, the paratype in the collection of the collector.

This species is related to *Tetragnatha antillana* Simon but is much smaller, paler in color, has shorter legs and differs in the details of the palpus and chelicera.

Metepeira minima, new species

Figure 31

MALE.—Total length, 2.70 mm. Carapace, 1.50 mm. long, 1.18 mm. wide.

Carapace dark brown, the cephalic portion pale yellowish brown, the thoracic portion with dark streaks, the eyes ringed in black. Carapace rubbed but apparently once sparsely covered with long pale hairs, the pars cephalica with two long spines on each side just behind the posterior lateral eyes, the clypeal margin with pale, weak spines. Chelicerae brown. Sternum brown, paler in the middle, the endites brown.

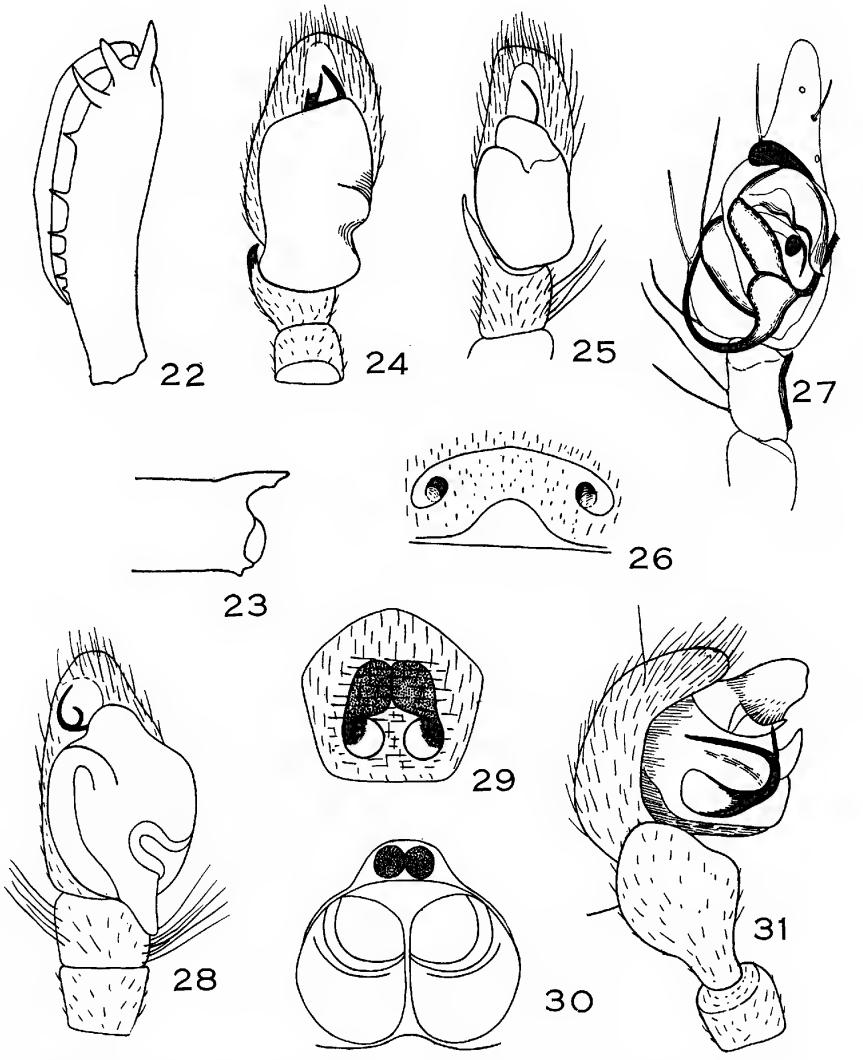

Fig. 22. *Tetragnatha seminola*, new species, right chelicera, dorsal view.
Fig. 23. *Tetragnatha seminola*, new species, right chelicera, lateral view of distal portion.
Fig. 24. *Metaphidippus furcifera*, new species, palpus, ventral view.
Fig. 25. *Rhetenor texanus*, new species, palpus, ventral view.
Fig. 26. *Rhetenor texanus*, new species, epigynum.
Fig. 27. *Wadotes tennesseensis*, new species, palpus, ventral view.
Fig. 28. *Neonella vinnula*, new species, palpus, ventral view.
Fig. 29. *Neonella vinnula*, new species, epigynum.
Fig. 30. *Bredana alternata*, new species, epigynum.
Fig. 31. *Metepeira minima*, new species, palpus lateral view.

distally paler. Coxae pale yellow. Integument of the legs pale yellow, the femora dark brown in the distal two-thirds, the patellae and tibiae lighter brown, the distal joints pale yellow; third leg pale throughout. Dorsum of abdomen gray to white, with a dark pattern as in the male of *M. labyrinthea* which masks the lighter color. Venter brown, with a quadrangular transverse black marking which encloses a white spot.

Carapace longer than broad, moderately convex, about equal in height for most of the length, the median suture a slight depression, the striae feebly indicated. Pars cephalica rounded in front, convex. Eyes of the first row slightly recurved as seen from in front, strongly recurved as viewed from above, the medians separated by three-fourths their diameter, half as far from the smaller laterals. Eyes of the second row recurved, the medians separated by two-thirds their diameter, one and one-third their diameter from the smaller laterals. Median ocular quadrangle two-thirds as long as broad, broader in front (30/24), the anterior eyes larger. Clypeus equal in height to one-fourth the diameter of an anterior median eye. Sternum longer than broad, subtriangular, with a small elevation at the third coxa of each side, pointed behind, the posterior coxae subcontiguous. Labium broader than long. Chelicera with three teeth on the lower margin. First tibia with 2–2–2–2 ventral spines, the last pair distal. First femur with 1–1–1–1 dorsal spines, as many stouter prolateral spines, and two ventral rows of 4 and 3 spines, none of the spines on the femur distal in position. Palpus as figured.

TYPE LOCALITY.—Male holotype and paratype from Edinburg, May 27, 1935, collected by Mr. Stanley Mulaik.

This small *Metepeira* is possibly identical with the species described by F. Cambridge from Mexico as *labyrinthea*. The true *labyrinthea* is very near if not identical with *Metepeira spinipes* F. Cambridge.

Agelenidae

Agelena oklahoma, new species

Figures 4 and 5

MALE.—Total length, 10.00 mm., exclusive of the spinnerets. Carapace, 5.00 mm. long, 3.50 mm. wide.

Integument of the carapace dirty yellow, the midline with seven long slender spines placed in a single series from the eye quadrangle to the median suture. Carapace with a narrow black seam on the margins and with two broad black bands above, the color due mainly to the presence of black hairs, the intervals between the bands forming a narrow longitudinal median light stripe. Sternum yellow, with two dark bands, the mouth parts and coxae yellow to light brown, rather thickly clothed with black hairs. Legs concolorous with the carapace, clothed with long black hairs and spines, the tibiae and metatarsi with inconspicuous black annulae. Abdomen reddish brown above, with two black stripes, leaving a paler median longitudinal band. Venter pale yellowish brown, the customary broad black band lacking, except for a narrow black margin line on each side.

Eyes of the first row strongly procurved, subequal, separated by a radius. Eyes of the second row strongly procurved, the medians slightly smaller, separated by a diameter, slightly farther from the laterals. Median ocular quadrangle longer than

broad, very slightly narrower in front, the eyes subequal. Clypeus as high as the diameter of an anterior lateral eye. Chelicerae with three teeth on the lower margin, three on the upper. Spines under all the tibiae, 2–2–2, under the metatarsi, 2–2–2. Tibia and patella of the first leg about equal in length to those joints of the fourth leg, longer than the carapace (12/10). Distal joint of the hind spinnerets twice as long as the basal.

Palpus closely related to the several species of the *naevia* group, differing chiefly in the character of the terminal portion of the embolus. Conductor a sclerotized spur about twice as long as broad, pointed at the end. Embolus a light spiraloid tube, far exceeding the margins of the cymbium, making one and one-half turns, the distal end acuminate, curved, without a pars pendula.

FEMALE.—Total length, 10.00 mm., not including the spinnerets. Carapace 4.30 mm. long, 2.50 mm. wide.

Color and structure of the female essentially as in the male. Venter of the abdomen with two narrow black lines. Legs shorter than in the male, the tibia and patella of the first pair equal in length to the carapace. Chelicerae with three teeth on the lower and three on the upper margin. Distal joint of hind spinnerets a little more than twice as long as the basal joint. Epigynum closely related to that of *Agelena potteri* Blackwall, the atrial cavity much broader than long, the atriobursal orifices well separated.

TYPE LOCALITY.—Male holotype and female allotype from Stillwater, Oklahoma, 1934 (Canace Smith).

Agelena absoluta, new species

Figure 6

FEMALE.—Total length, 10.65 mm., exclusive of the spinnerets. Carapace, 5.00 mm. long, 3.06 mm. wide. Abdomen, 6.40 mm. long, 4.45 mm. wide.

Integument of carapace light brown, the midline with twelve slender bristles in a single series and six on the clypeal margin. Carapace clothed with short black hairs, the margins with a narrow black seam, the dorsum with two longitudinal black stripes. Sternum, mouth parts and coxae light brown, clothed with black hairs. Legs light brown, the femora with some black maculations, the other joints lacking annulae. Abdomen dark brown above, with two pale longitudinal stripes made up of spots in the caudal half.

Eye area scarcely half as broad as the width of the head (7/16). Eyes of the first row strongly procurved, subequal, separated by a radius. Eyes of the second row strongly procurved, subequal, the medians separated by two-thirds their diameter, about a diameter from the laterals. Median ocular quadrangle slightly longer than broad, the eyes subequal. Clypeus equal in height to twice the diameter of an anterior lateral eye. Chelicerae with two subequal teeth on the lower margin, three on the upper. Spines under all the tibiae and metatarsi, 2–2–2. Tibia and patella of the fourth leg about as long as the carapace, longer than tibia and patella of the first leg (8/10). Distal joint of the hind spinnerets nearly twice as long as the basol joint (5/9).

Epigynum resembling in many respects that of *Agelena californica* Banks. Atrium a deep cavity, broader than long, with a finger-like projection from the anterior margin. Atriobursal orifices widely separated. In *californica* the atrium is but

weakly depressed and the orifices are much closer together. In addition to differences in the epigynum this species is distinct from *californica* in size, being considerably larger than that species (10.65 mm./8.00 mm.).

TYPE LOCALITY.—Female holotype from Los Angeles, California, November–December, 1927, collected by G. Grant.

Wadotes tennesseensis, new species

Figure 27

MALE.—Total length, 6.80 mm. Carapace, 3.70 mm. long, 2.50 mm. wide.

Carapace yellowish brown in color, the margins with a narrow black seam, the sides with an indistinct long dark stripe between which is a longitudinal pale band. Carapace clothed sparsely with black hairs. Chelicerae dark brown, the labium and endites light brown, the sternum yellowish brown, all clothed with black hairs. Coxae and legs uniform yellowish brown, without annulae, clothed with black hairs.

Carapace longer than broad, strongly convex, highest just behind the eyes, the sides of the pars cephalica strongly convex, the pars thoracica lower and less convex. Eye area scarcely two-thirds as broad as the carapace (18/30), the first row directed forward, straight, the medians separated by scarcely a radius, as far from the much larger laterals. Second row of eyes straight, the medians separated by scarcely a diameter, fully a diameter from the subequal laterals. Median ocular quadrangle longer than broad, slightly narrower in front, the anterior eyes much smaller. Chelicera with two stout teeth on the lower margin. Sternum longer than broad (35/30), truncated in front, the anterior coxae separated by their length, pointed behind, the posterior coxae subcontiguous. Labium longer than broad (13/11). First tibia and metatarsus with 2–2–2 ventral spines and one prolateral. Tibia and patella of the first leg as long as the carapace. Palpus as figured.

FEMALE.—Total length, 1.50 mm. Color and structure as in the male. Epigynum as in *Wadotes calcaratus* but the finger-like apophysis subspatulate.

TYPE LOCALITY.—Male holotype, female allotype and paratypes of both sexes from the sides of Mount Leconte, Great Smoky Mountains, Tennessee, July 9, 1933 (W. J. Gertsch). Idem, three female paratypes, September 9, 1928 (W. M. Barrows).

This species is characterized especially by the palpus which lacks a projection of any kind on the tarsus which, however, is furnished with a deep dorsal depression.

Cybaeus minoratus, new name

Cybaeus minor BANKS, 1904, Proc. California Acad. Sci., III, p. 341, Pl. XXXVIII, fig. 4, Pl. XL, fig. 44. (Not *Cybaeus minor* Chyzer and Kulczynski, 1897.)

Thomisidae

Tmarus unicus, new species

Length of female holotype, 4.00 mm., from the clypeal margin to the end of the caudal tubercle.

Carapace gray to light brown, marmorate, the dorsum paler, with three white streaks that converge at the posterior declivity, the sides light brown. Clypeal margin and eye region with small brown markings. Sternum and mouth parts dusky over a pale base. Legs dull yellow, thickly maculate with small brown spots. Abdomen marmorate above, the spinal tubercles yellow, the sides lined with white, the venter with a median longitudinal dark band which encloses a paler streak.

	Carapace	Front	Sternum	Labium	Endite	Abdomen
Length	1.57	0.32	0.87	0.36	0.50	2.50 mm.
Width	1.15	0.75	0.50	0.17	0.50	1.00 mm.

Carapace much longer than broad, subquadrangular in outline, the caudal margin subtruncate, the sides weakly rounded, the truncate clypeus two-thirds as wide as the greatest width. Carapace as seen from the side moderately high, about equally high from the posterior eye row to the posterior declivity, which drops rather abruptly. Clypeus on a slightly lower plane than the rest of the carapace but practically horizontal, with the usual seven spines, six of them margin and one, the median, slightly above the margin. Other spines on the carapace as in other species of the genus. Sternum much longer than broad, clothed with fine black hairs. Labium twice as long as broad. Abdomen two and one-half times as long as broad, highest caudally, very rugose, the spines on elevated tubercles, the caudal tubercle of moderate size.

First row of eyes narrower than the second (9/12), straight, the medians separated by more than two diameters (7/18), as far from the laterals. Second row of eyes recurved, the medians separated by nearly three diameters (10/28), farther from the laterals (28/33). Median ocular quadrangle broader than long (20/24), narrowed in front (16/24). Ratio of the eyes: ALE:AME:PLE:PME = 17:7:14:10. Clypeus about as broad as the height of the median quadrangle (19/20).

Leg formula, 1243. First femur one and one-half times the length of the carapace. Legs clothed with fine black hairs, the first and second metatarsi with three pairs of ventral spines, the last pair apical.

	Femur	Patella	Tibia	Metatarsus	Tarsus	Total
I	2.25	0.75	1.62	1.40	0.75	6.77 mm.
II	2.10	0.75	1.57	1.35	0.75	6.52 mm.
III	0.75	0.37	0.80	0.42	0.40	2.74 mm.
IV	1.17	0.37	0.80	0.42	0.40	3.16 mm.

Type Locality.—Immature female holotype from Edinburg, Texas, taken March 3, 1934, by Mr. Stanley Mulaik.

Xysticus furtivus, new species

Total length of female allotype, 3.75 mm.

Color as in *Xysticus cunctator* but the carapace somewhat more mottled with black, the cephalic portion of the pale longitudinal stripe considerably invaded by dark markings. Legs white, the basal joints with distinct large black maculations. Abdomen mainly gray, inconspicuously spotted with black.

	Carapace	Front	Sternum	Labium	Endite	Abdomen
Length	1.75	0.53	0.87	0.30	0.55	2.12 mm.
Width	1.85	1.00	0.72	0.40	0.25	2.50 mm.

Carapace clothed with conspicuous erect black spines, placed as usual in the genus, the clypeal margin with seven. Pars cephalica at the second eye row about two-thirds as wide as the greatest width (47/75). Abdomen set with long black spines.

Eyes of the first row narrower than the second (28/31), recurved, the medians separated by nearly three diameters (14/38), a diameter from the laterals (14/16). Second row of eyes recurved, the medians separated by two and one-half diameters (13/32), farther from the laterals (13/45). Median ocular quadrangle broader than long (63/55), broader in front (63/58). Ratio of the eyes: ALE:AME:PLE:PME = 22:14:18:13. Clypeus about twice as high as the diameter of an anterior median eye (14/25).

Legs clothed with strong hairs, the spinal armature being as follows: femur, prolateral, 3, otherwise, 0. Tibia, prolateral and retrolateral, 0, ventral, 1–2–2–2. Metatarsus, prolateral, 0–1–1, retrolateral, 0–1–0, ventral, 1–2–2–2. First leg: femur, 1.57 mm., patella, 0.92 mm., tibia, 1.12 mm., metatarsus, 1.12 mm., and tarsus, 0.62 mm. long.

Vulva oval to suborbicular in outline, shallowly excavated, provided with a very narrow median septum that is only slightly expanded near the caudal end. Atriobursal orifices running obliquely forward from near the caudal end of the median septum.

Total length of male holotype, 3.00 mm.

Color as in the female but the carapace darker, reddish brown, the median band virtually obsolete. Basal joints of the legs heavily maculate in black.

	Carapace	Front	Sternum	Labium	Endite	Abdomen
Length	1.60	0.42	0.80	0.32	0.42	1.60 mm.
Width	1.60	0.87	0.65	0.25	0.18	1.60 mm.

Spinal armature of the carapace and abdomen as in the female.

Eyes of the first row narrower than the second (23/26), recurved, the medians separated by two diameters (13/30), a diameter from the laterals (13/13). Second row of eyes recurved, the medians separated by two diameters (12/27), three diameters from the laterals (12/35). Median ocular quadrangle broader than long (53/46), slightly broader in front (53/51). Ratio of the eyes: ALE:AME:PLE:PME = 23:13:17:12. Clypeus about as high as the diameter of an anterior median eye (13/18).

Spines of the first leg: femur, prolateral, 4, dorsal, 3. Tibia, prolateral and retrolateral, 1–1–1, ventral, 2–2–2–2. Metatarsus, prolateral, 0–1–1, retrolateral, 0–0–1, ventral, 2–2–2. First leg: femur, 1.62 mm., patella, 0.75 mm., tibia, 1.12 mm., metatarsus, 1.25 mm., and tarsus, 0.70 mm. long.

Palpus essentially as in *cunctator* but the embolus completely lacks a pars pendula.

Type Locality.—Male holotype and female allotype from Edinburg, Texas, collected by Mr. Stanley Mulaik.

Clubionidae

Syspira analytica Chamberlin

Syspira analytica CHAMBERLIN, 1924, Proc. California Acad. Sci., (4), XII, p. 663, Fig. 107.

LOCALITY.—Tucson, Arizona, July–August, 1935, a female probably of this species collected by Mr. Peter Steckler.

Syspira eclectica Chamberlin

Syspira eclectica CHAMBERLIN, 1924, Proc. California Acad. Sci., (4) XII, p. 664, Fig. 108.

LOCALITY.—Tucson, Arizona, July–August, 1935, a male probably of this species, characterized by the large size of the anterior median eyes, collected by Mr. Peter Steckler.

Chemmis steckleri, new species

FEMALE.—Total length, 4.60 mm. Carapace, 2.30 mm. long, 1.90 mm. wide.

Carapace uniform yellowish brown, sparsely clothed with short erect black hairs, the eyes ringed in black. Chelicerae reddish brown, armed with long black hairs. Sternum and coxae yellow, with erect black hairs, the labium and endites yellowish brown, distally paler. Legs yellow, unmarked, sparsely clothed with rows of black hairs. Abdomen pale yellow to gray, clothed with fine hairs and evenly covered with black setae.

Carapace longer than broad, evenly convex, moderately high, broad in front, the head portion nearly two-thirds as wide as the widest point (58/95) which is at the third coxae. Head sutures obsolete, the median groove longitudinal. Eyes of the first row weakly procurved as seen from in front, the medians separated by three-fifths their diameter, less than half as far from the smaller laterals. Clypeus equal in height to the diameter of an anterior median eye. Eyes of the second row very weakly procurved, the posterior edges of the eyes in a straight line, the medians separated by one and one-fourth their diameter, as far from the slightly larger lateral eyes. Median ocular quadrangle slightly broader than long (33/30), broader in front by the same ratio, the anterior eyes much larger. Eye group seven-twelfths as wide as the head at that point. Sternum slightly longer than broad (60/55), cordate, broadly truncated in front, the anterior coxae separated by their length, bluntly pointed behind, the posterior coxae subcontiguous. Labium three-fourths as broad as long, subquadrangular in outline, half as high as the subparallel rounded endites. Chelicerae with four well-separated teeth on the lower margin, three on the upper. Coxae subequal in length. First leg spines as follows: femur, dorsal, 1–1, no distals, prolateral, 1, tibia, ventral, 2–2–2–2–2–2, the last pair distal, metatarsus, ventral, 2–2, the last pair not distal. Second leg as first but femur, dorsal, 1–1–1, prolateral, 1–1–1, tibia, ventral, five pairs and two single prolaterals. Tibia and patella I, 2.45 mm., IV, 2.00 mm. long. Terminal joints of spinnerets very short. Epigynum not fully developed.

TYPE LOCALITY.—Female holotype from Tucson, Arizona, July–August, 1935, collected by Mr. Peter Steckler.

This species is distinct from *Chemmis frederici* Simon in lacking a dark pattern on the dorsum, in the presence of distal spines beneath the anterior tibiae and in having four teeth on the lower cheliceral margin. The species described by Banks from Arizona, *Chemmis unicolor*, probably belongs in *Anachemmis* Chamberlin, for the anterior median eyes are not larger than the laterals.

Phrurolithus leviculus, new species

Figures 17 and 18

MALE.—Total length, 1.30 mm. Carapace, 0.65 mm. long, 0.55 mm. wide.

Integument of the carapace pale yellow to white, smooth, the few hairs inconspicuous, the eyes ringed in black. Under parts and legs concolorous with the carapace, the distal joints of the palpus light brown. Abdomen pale yellow, the dorsum somewhat sclerotized, clothed sparsely with pale hairs.

Carapace longer than broad, convex, the sutures obsolete. Pars cephalica at the second eye row about three-fifths as broad as the carapace. First row of eyes slightly narrower than the second, procurved, the medians separated by one-fourth their diameter, subcontiguous with the subequal laterals. Second row of eyes procurved, the medians very large, oblique, close together, separated by one-fifth their long diameter, as far from the much smaller laterals. Median ocular quadrangle as broad as long, slightly narrowed in front, the posterior eyes very much larger. Clypeus as high as three-fourths of the diameter of an anterior median eye. Sternum longer than broad (44/40), cordate, broadly truncated in front where the anterior coxae are separated by one and one-fourth times their length, gently rounded on the sides, bluntly rounded behind and between the posterior coxae which are separated by nearly their length (15/18). Labium broader than long (13/7). Tibia of the first leg with five pairs of ventral spines, the last pair not distal, the metatarsus with four pairs, no distals. First leg: femur, 0.57 mm., patella, 0.23 mm., tibia, 0.59 mm., metatarsus, 0.57 mm., and tarsus, 0.33 mm. long. Palpus as figured, the ventral femoral spur near the base of the joint.

FEMALE.—Total length, 1.55 mm. Color as in the male. Structure essentially as in the male but the eyes of the posterior row straighter, the medians proportionately not so large and slightly farther apart. Epigynum as figured.

TYPE LOCALITY.—Male holotype, female allotype and male and female paratypes from Edinburg, Texas, June 2, 1935, collected by Mr. Stanley Mulaik. Female paratype from Edinburg, Texas, September 14, 1935 (S. Mulaik).

Salticidae

Peckhamia seminola, new species

Figures 36 and 37

MALE.—Total length, 3.80 mm. Carapace, 2.00 mm. long, 1.10 mm. wide.

Carapace reddish brown, thinly covered with white hairs, the posterior eyes broadly ringed with black, the anterior laterals with a black maculation behind each

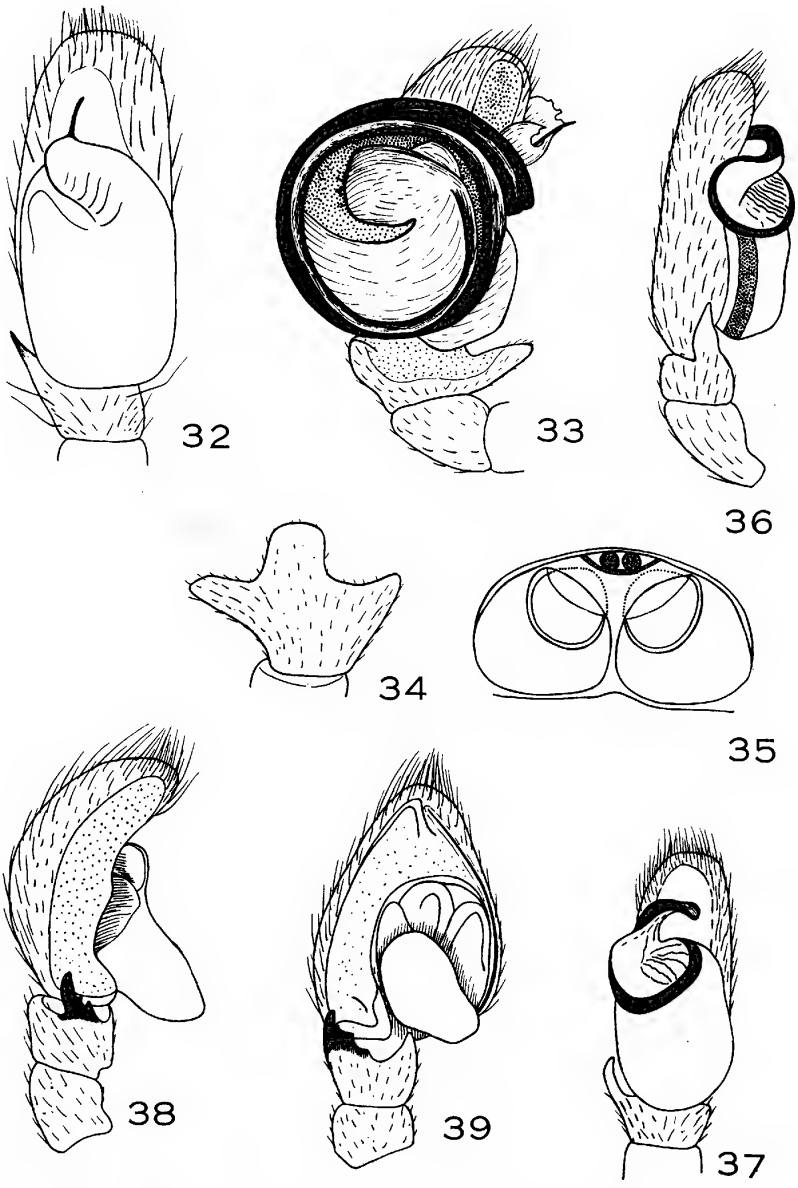

Fig. 32. *Cheliferoides longimanus*, new species, palpus, ventral view.
Fig. 33. *Bredana complicata*, new species, palpus, ventral view.
Fig. 34. *Bredana complicata*, new species, palpus, dorsal view of tibia.
Fig. 35. *Bredana complicata*, new species, epigynum.
Fig. 36. *Peckhamia seminola*, new species, palpus, lateral view.
Fig. 37. *Peckhamia seminola*, new species, palpus, ventral view.
Fig. 38. *Hyctia grata*, new species, palpus, lateral view.
Fig. 39. *Hyctia grata*, new species, palpus, ventral view.

one. Legs reddish brown, unmarked, sparsely clothed with inconspicuous hairs. Underside of carapace concolorous with the legs. Abdomen nearly black above, covered with minute iridescent scales and sparsely clothed with white hairs.

Carapace about twice as long as broad, flattened above, the posterior declivity convex, the sides nearly vertical. Eyes of the first row recurved, the upper margins forming a weakly recurved line, subcontiguous, the diameter of the laterals about half that of the large medians. Small eyes of the second row much nearer the anterior laterals than the posterior side eyes (25/51). Posterior row of eyes broader than the first row (11/10), the quadrangle of the laterals longer than broad (106/97). Eyes occupying three-fifths of the total length of the carapace (12/20). Sternum much broader than long (7/3), pointed behind, the posterior coxae contiguous. Anterior coxae separated by about one-fourth their width. Chelicerae slightly excavated on the inner side, the lower margin with a compound tooth, the upper margin with the two teeth near together but separated. Abdomen longer than broad (9/6), normal, unconstricted. First leg considerably enlarged, the prolateral and retrolateral surfaces of the femur, patella, and tibia flattened, the tibia twice as long as its breadth as seen from the side. First leg spined as follows: femur, dorsal, 1–1, tibia, ventral, 2–2–2, the metatarsus, ventral, 2–2, elsewhere none. Tibia and patella of the first leg seven-tenths as long as the carapace. Palpus as in *Peckhamia americana* (Peckham) but the embolus much heavier and more strongly curved. Details of palpus as figured.

TYPE LOCALITY.—Male holotype from Fort Meyers, Florida.

This is the fifth species of *Peckhamia* to be described from the United States. It is closely related to *P. americana* but differs in having the abdomen unconstricted and in the details of the palpus.

Salticus austinensis, new name

Epiblemum albocinctus PECKHAM, 1896, Occas. Papers Nat. Hist. Soc., Wisconsin, III, p. 84.

Salticus albocinctus PECKHAM, 1909, Trans. Wisconsin Acad. Sci., XVI, p. 479. (Not *Salticus albocinctus* C. Koch, 1846.)

BREDANA, NEW GENUS

A genus of the subfamily Marpissinae. Carapace moderately high, longer than broad, gently rounded on the sides, the posterior declivity steep. Eyes of the first row recurved, subcontiguous, the laterals half the diameter of the medians. Small eyes of the second row nearer the laterals. Ocular quadrangle a little broader behind, broader than long, occupying about half the length of the carapace. Sternum longer than broad, truncate in front, the first coxae widely separated. Labium longer than broad. Chelicera with a single tooth on the lower margin. Legs all weak, none enlarged or modified, unspined, except the first metatarsus.

GENOTYPE.—*Bredana complicata*, new species.

This genus is closely related to *Salticus* but is distinct in the comparatively weak chelicerae of the male, the position of the small eyes of the second row, in having spines beneath the first metatarsi and in the very complicated palpus.

Bredana complicata, new species

Figures 33, 34, and 35

MALE.—Total length, 3.08 mm. Carapace, 1.50 mm. long, 1.00 mm. wide.

Carapace sparsely clothed with black hairs, with a small patch of white scales between the median eyes of the first row and with similar patches behind the lateral eyes of the third row. Ocular area enclosed in a black maculation which continues behind triangularly from the posterior side eyes to the inconspicuous median suture. Pars thoracica lighter, dark brown. Sternum black, clothed with pale hairs, the mouth parts brown, with a few black hairs. Coxae pale yellow. Legs pale yellow, the femora brown, the patellae and tibiae with a prolateral brown band, the tarsi pale yellow except the first which is dusky. Legs with black hairs and a few white scales above. Palpus brown, the patella with a few white scales above, the hairs of the joints otherwise black. Abdomen black, shining, clothed with black hairs and with five patches of white scales in the basal half, one at the base above the pedicel and two pairs behind near the margin. Sides of the abdomen black, the venter somewhat paler, with white hairs near the base.

Carapace one and one-half times as long as broad, broadest between the second coxae, narrowed slightly in front and narrowed and rounded behind. Carapace highest at the third eye row, declining gradually in front and dropping gradually behind to the posterior declivity which is precipitous, the sides near vertical. Eyes of the first row recurved, the upper margins forming a very weakly procurved line, subcontiguous, the lateral eyes about half the diameter of the large medians. Small eyes of the second row nearer the anterior lateral than the posterior side eye (15/22). Third eye row four-fifths as wide as the carapace at that point, wider than the first row (72/82), the quadrangle of the laterals broader than long (82/58). Eyes occupying about half of the length of the carapace (70/145). Chelicerae moderate in size, set somewhat obliquely, the lower margin with a single tooth. Sternum longer than broad (67/42), broadly truncate in front and separating the anterior coxae by more than their length (7/5), the sides gently rounded, the caudal end bluntly pointed, the posterior coxae subcontiguous, separated by only one-fourth their width. Labium longer than broad (25/20), about half as high as the parallel endites, the distal ends of which are rounded. Legs unspined except the first metatarsus which has a single submedian and a distal pair of ventral spines. Palpus as figured.

FEMALE.—Total length, 3.70 mm. Carapace, 1.50 mm. long, 0.96 mm. wide.

Color and structure as in the male but the abdomen duller black above and pale yellow below.

TYPE LOCALITY.—Male holotype and paratype from below Weslaco, Llano Grande, Texas, April 27, 1934, collected by Mr. Stanley Mulaik. Female allotype from Brownsville, Texas, June 8, 1934, collected by Mr. J. N. Knull.

Bredana alternata, new species

Figure 30

FEMALE.—Total length, 3.40 mm. Carapace, 1.72 mm. long, 1.13 mm. wide.

Carapace dull to deep black, the pars thoracica dull black with inconspicuous black lines, clothed evenly but sparsely with white hairs. Sternum black, with black

hairs, the mouth parts dull black, distally paler. Chelicerae black. Legs pale yellow, with very inconspicuous annulae on the basal joints, clothed with white hairs and a few black spines. Abdomen gray above, with indistinct dark chevrons made up of large spots, evenly covered with white and black hairs. Venter pale, dusky yellow.

Carapace one and one-half times as long as broad, narrowed somewhat in front, gently rounded on the sides, widest midway between the posterior eye row and the caudal margin. Carapace as seen from the side flat in the ocular region, the pars thoracica lower, the posterior declivity moderately steep. Sides of the pars cephalica vertical. Carapace evenly covered with round pits from which the white hairs arise. First row of eyes recurved as seen from above, the lateral eyes set farther back, weakly recurved from in front, the upper margins of the eyes forming a weakly procurved line. Eyes of the first row subcontiguous, the diameter of the laterals scarcely half that of the large medians. Small eyes of the second row nearer the anterior laterals than the posterior side eyes (18/30). Third eye row broader than the first (93/100), the eyes equal in size to the anterior laterals, the quadrangle of these eyes broader than long (100/70). Eyes occupying one-half the total length of the carapace. Sternum longer than broad (73/45), truncated in front, the anterior coxae separated by their length or by the width of the labium, pointed behind where the posterior coxae are subcontiguous. Labium slightly broader than long. Chelicera with a single tooth on the lower margin. Legs unspined except for 1–1–1 dorsals on all the femora, 2–2 beneath the first metatarsus and a distal pair beneath the other metatarsi. Epigynum as figured.

TYPE LOCALITY.—Female holotype from fifteen miles southwest of Harlingen, Texas, taken November 18, 1934, by Mr. Stanley Mulaik.

This species may not belong in *Bredana* but as the agreement is good in many characters and the epigyna are similar, it is placed here for the present.

Cheliferoides longimanus, new species

Figure 32

MALE.—Total length, 3.20 mm. Carapace, 1.30 mm. long, 0.67 mm. wide.

Carapace light to dark brown, the margins with a black seam, the eye region darker, with two black spots in the center and two dark bands that include the side eyes of each side and are continued caudally to the margin in two less distinct, brown bands, the interval between them yellowish brown. Carapace clothed with black hairs and white scales. Sternum yellow, the coxae somewhat paler, the chelicerae, labium and endites brown. First leg dark reddish brown, the second pale yellow, the last two pale yellow but with a brown prolateral stripe on all the joints but the tarsus. Basal joints of the palpus brown, the tibia and tarsus pale yellow. Dorsum of the abdomen pale yellow to gray, with a central longitudinal dark marking which is followed by three or four chevrons. Sides of the abdomen with a dark band which continues caudally to include the spinnerets, leaving a long oval, pale yellow maculation on the venter.

Carapace longer than broad, subtruncate in front, the sides weakly rounded for two-thirds the length, then gradually narrowed to the pedicel. Carapace flat above,

equal in height for most of the length on the midline, the sides nearly vertical in front but gradually more convex back to the pedicel. Eyes occupying less than half of the length of the carapace (11/27). First row of eyes as broad as the carapace in front, recurved, the dorsal margins forming a very weakly recurved line, subcontiguous, the laterals about half the diameter of the very large medians. Small eyes of the second row much nearer the posterior side eyes than the anterior laterals (11/17). Third eye row as broad as the first, the eyes equal in size to the anterior laterals, the quadrangle of the laterals broader than long (67/48). Sternum twice as long as broad (67/33), narrowed and truncated in front where the anterior coxae are separated by three-fourths their width, rounded on the sides, pointed behind, the posterior coxae subcontiguous. Labium longer than broad (18/15), half as high as the endites which are rounded at the ends. Basal joints of the first leg strongly incrassated, flattened on the sides, the femur from the side three-eighths as broad as long, the tibia from the side twice as long as broad. First tibia with 2–2–2 stout ventral spines in the distal half, the ventral surface also supplied with numerous large spatulate hairs. First metatarsus with 2–2 ventral spines in the distal half. Second leg with 1–1–1 ventral spines beneath the tibia and 1–2 beneath the metatarsus. Last two legs unspined. Tibia and patella of the first leg slightly longer than the carapace, much longer in the male paratype. Palpus as figured.

FEMALE.—Total length, 3.10 mm. Carapace, 1.45 mm. long, 0.75 mm. wide.

Color and structure of the female exactly as in the male but the first leg shorter, the tibia and patella shorter than the carapace (6/7).

TYPE LOCALITY.—Male holotype from below Weslaco, Llano Grande, Texas, taken April 28, 1934, by Mr. Stanley Mulaik. Male paratype from seven miles east of Edinburg, Texas, October 27, 1934 (S. Mulaik). Female allotype from fifteen miles southwest of Harlingen, Texas, November 18, 1934 (S. Mulaik). Female paratype from five miles southwest of Weslaco, Texas, July 21, 1935 (S. Mulaik). Female paratype from Umatilla, Florida, March 2, 1933 (H. K. Wallace).

This interesting species which seems to belong in *Cheliferoides* is quite distinct from *C. segmentatus* F. Cambridge in a number of characters. The broader than long eye quadrangle, which is not wider behind, the much longer and narrower carapace, the presence of large spatulate hairs beneath the greatly incrassated tibia of the first leg and the palpus will separate it from Cambridge's species. A female of a second species from Texas agrees in color pattern with *segmentatus*, which was described from a male, and is probably referable to that species.

NEONELLA, NEW GENUS

A genus belonging apparently in the Sitticinae and agreeing with *Neon* in having the lower margin of the chelicera unidentate. Spiders very small, both sexes similar in appearance and structure. Carapace longer than broad, relatively high, flat above. Eyes of the first row straight, contiguous. Small eyes of the second row

approximately midway between the lateral eyes of the first and third rows, the quadrangle of these laterals much broader than long. Eyes occupying one-half the length of the carapace. Sternum longer than broad, broadly truncated in front. Labium longer than broad, the endites convergent and touching at the ends. Legs short, all about equal in size, the first tibia with 2–2 ventral spines, no distals, the metatarsus with 2–2 ventral spines, one pair distal.

GENOTYPE.—*Neonella vinnula*, new species.

Neonella vinnula, new species

Figures 28 and 29

FEMALE.—Total length, 1.50 mm. Carapace, 0.70 mm. long, 0.55 mm. wide.

Carapace bright yellow, the ocular area black except in the middle, the sides with a narrow black marginal seam, the posterior declivity with a few black lines, the integument smooth, with a few black hairs in the ocular region. Sternum, mouth parts and legs bright yellow, clothed with dark hairs, the legs with very faint narrow distal annulae on some of the joints. Palpus black except the coxal portion which is yellow. Abdomen clothed sparsely with pale hairs, the dorsum with two longitudinal black bands the whole length and a like band on each side, leaving a central pale stripe and one on each side. Venter gray to white, with white hairs.

Carapace longer than broad, gently rounded in front, the sides subparallel and vertical, the posterior declivity steeply declining. Sutures obsolete. Pars cephalica flat above, the eyes protruding somewhat beyond the clypeal margin. Eyes of the first row straight, contiguous, the lateral eyes three-fifths the diameter of the large medians. Small eyes of the second row slightly nearer the posterior than the anterior side eyes (6/8). Eyes of the third row slightly broader than the first (55/53), the side eyes larger, the quadrangle of the laterals much broader than long (55/33). Eyes occupying one-half of the total length of the carapace. Sternum broader than long (30/24), broadly truncated in front, the anterior coxae separated by one and one-half times their length, separated by nearly twice the width of the labium, bluntly pointed behind where the posterior coxae are subcontiguous. Labium broader than long, half as high as the rounded, convergent endites. Chelicera with a single small tooth on the lower margin. First leg with 2–2 spines beneath the tibia, a subbasal and a submedian pair, and 2–2 spines beneath the metatarsus, a basal and a distal pair. First leg: femur, 0.33 mm., patella, 0.20 mm., tibia, 0.20 mm., metatarsus, 0.17 mm., and tarsus, 0.16 mm. long. Fourth leg longer than the third. Epigynum as figured.

MALE.—Total length, 1.33 mm. Color essentially as in the female but the abdomen bright yellow, with two dorsal dark bands as in the female but the laterals dark bands reduced in size or missing. Palpus of the male yellow except for a dark spot on the prolateral surface of the femur. Details of palpus as figured.

TYPE LOCALITY.—Male holotype and female allotype from St. Petersburg, Florida, April 8, 1933, collected by Mr. H. K. Wallace. Male paratype from Edinburg, Texas, December, 1934 (S. Mulaik). Female paratype from Cameron County, Texas, December, 1934 (L. Irby Davis).

Hyctia grata, new species

Figures 38 and 39

MALE.—Total length, 4.40 mm. Carapace, 2.00 mm. long, 1.33 mm. wide.

Carapace dark brown to black, shining, the eye region and sides darker, clothed with a few short white hairs and longer black ones in the ocular region. Sternum and mouth parts dark brown, clothed with dark hairs. Legs yellowish brown, unmarked, sparsely covered with short black hairs. Abdomen pale beneath and with a median dark line, the dorsum dark brown, rather thickly covered with shining golden scales and clothed with a few long dark hairs.

Carapace much longer than broad, moderately high, flat above for most of the length, the sides and the posterior declivity rounded. Carapace broadest at a point between the second and third coxae, somewhat narrowed in front, more broadly rounded caudally. Eyes of the first row very weakly recurved, the upper margins forming a very weakly procurved line, the eyes subcontiguous, the laterals about one-half the diameter of the large medians. Small eyes of the second row midway between the posterior side eye and the anterior laterals, these eyes forming a quadrangle much broader than long (110/75). Third row of eyes broader than the first (60/57), the laterals subequal. Eye group occupying less than one-half of the total length of the carapace (43/100). Sternum five-eighths as broad as long, greatly narrowed in front where the coxae are scarcely separated, bluntly pointed behind, the posterior coxae subcontiguous. Labium longer than broad (30/26). First leg much more robust than the others, the tibia with 2–2–2 ventral spines and a prolateral and retrolateral that are nearly ventral in position, the metatarsus with 2–2 ventral pairs of spines. First leg: femur, 1.20 mm., patella, 0.80 mm., tibia, 1.00 mm., metatarsus, 0.70 mm., and tarsus, 0.45 mm. long. Palpus as figured.

TYPE LOCALITY.—Male holotype from Minneapolis, Minnesota, May 18, 1932 (W. J. Gertsch).

Hyctia grata is readily distinguished from the two common species of the genus in the United States. It is much more robust than *H. pikei* and the abdomen is only twice as long as broad. It may be separated from *H. bina* by its much smaller size and its shorter first legs, the tibia and patella of which are longer than the carapace in *bina*, and by the different color pattern. It is structurally much like *H. robusta* of Arizona and California but is a much smaller species.

Rhetenor texanus, new species

Figures 25 and 26

MALE.—Total length, 3.30 mm. Carapace, 1.90 mm. long, 1.60 mm. wide.

Carapace dark reddish brown, the eyes broadly ringed with black, clothed sparsely with white scales, the first eye row with longer dark hairs overlapping the eyes. Sides of the carapace with a narrow marginal band of white scales. Sternum light brown, with inconspicuous black hairs, the labium and endites dark reddish brown, the ends paler, clothed with black hairs. First coxa dark brown, the others light brown. First leg dark reddish brown, sparsely clothed with white scales and black hairs. Other legs lighter brown, paler beneath, with brown prolateral and

retrolateral bands, clothed with white scales and black hairs. Abdomen dark reddish brown, shining, strongly sclerotized, with an incomplete median pale transverse band and a curved yellow transverse band just above the spinnerets, the venter lighter brown. Light markings of the dorsum thickly set with white scales.

Carapace weakly convex above, broader than long, the sides vertical, the posterior margin deeply emarginated, the posterior declivity nearly vertical. Eyes of the first row recurved, the medians subcontiguous, the laterals slightly separated from the medians and half their diameter. Small eyes of the second row much nearer the anterior lateral than the posterior side eye (25/75). Posterior eye row much broader than the anterior row (97/70), the side eyes about equal in size to the anterior laterals, the quadrangle of these eyes much broader than long (67/97). Sternum longer than broad (70/62), truncate in front and broadly separating the anterior coxae by their width, bluntly rounded behind, the posterior coxae subcontiguous. Labium broader than long (40/34), half as high as the rounded endites. Chelicerae large, oblique, the upper margin with a small tooth, the lower margin with a large compound tooth as in *Zygoballus*. First leg much heavier than the others, the femora quite flat on the sides, about half as broad as long (40/75), with 1–1–1 dorsals and a single distal prolateral spine. Patella and tibia of the first leg subequal in length, the latter with 2–2–2 stout ventral spines in the distal half, the metatarsus with 2–2 spines beneath. Last two pairs of legs unspined. Palpus as figured. Abdomen longer than broad (85/100), oval, fitting closely in the recurved caudal margin of the carapace.

FEMALE.—Total length, 2.50 mm. Carapace, 1.10 mm. long, 1.50 mm. wide. Structure and color essentially as in the male. Epigynum as figured.

TYPE LOCALITY.—Male holotype from Brownsville, Texas, May 25, 1934, collected by Mr. J. N. Knull. Female allotype from fifteen miles southwest of Harlingen, Texas, November 18, 1934 (S. Mulaik).

This interesting species seems to conform rather well to the genus *Rhetenor* Simon but various differences make it probable that it will ultimately be placed in a distinct genus.

Metaphidippus furcifera, new species

Figure 24

MALE.—Total length, 4.50 mm. Carapace, 2.30 mm. long, 1.77 mm. wide.

Carapace bright reddish brown, the sides darkened, the eyes broadly ringed with black. Sides of the carapace with a narrow marginal line of white scales, with scattered golden scales above the margin and a line of white scales from the posterior side eye to near the caudal margin. Ocular area with inconspicuous golden scales which are more numerous on the sides of the head and between the eyes, the clypeal margin thickly covered with long white hairs. Chelicerae dark reddish brown, the basal half with white hairs, the remainder with black hairs. Sternum dark reddish brown, clothed with soft white hairs, the mouth parts concolorous. Legs dark reddish brown, darker on the prolateral side, the dorsum with a pale stripe. Abdomen dark reddish brown, the dorsum with a narrow white band clothed with white hairs, and two indistinct narrow longitudinal bands the whole length made up of small spots, clothed with white hairs, the remainder of the dorsum with a sparse covering of

iridescent golden scales. Venter brown, with numerous small black spots and clothed with short white hairs.

Carapace longer than broad, widest at the second coxae, the front subtruncate, the posterior margin broadly rounded. Carapace highest at the posterior eye row, gently sloping anteriorly and caudally beyond the median suture, then more strongly declining to the posterior margin. Sides of the pars cephalica weakly convex, subvertical. First row of eyes recurved, a line on the upper edges of the eyes recurved, subcontiguous, the laterals scarcely half the diameter of the large medians. Small eyes of the second row nearer the anterior lateral eye than the posterior side eye (25/35), the quadrangle of these eyes broader than long (9/14), narrower in front (125/137). Eye area occupying five-elevenths of the total length of the carapace. Chelicera with a single tooth on the lower margin. Sternum longer than broad (90/55), truncated in front, the anterior coxae separated by their width, bluntly pointed behind, the posterior coxae subcontiguous. First tibia with 2–2–2 ventral spines in the distal half of the joint, the metatarsus with 2–2 ventral spines. Palpus as figured.

TYPE LOCALITY.—Male holotype from below Esparo Ranch, Beaver Creek, Greenlee County, Arizona, collected by Mrs. Frances Frick Jacot.